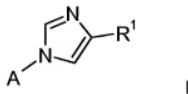


**Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Claim 1 (original)** A compound according to formula I:



wherein:

A represents:



II

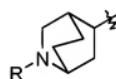


III



IV

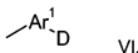
or



V

where R represents hydrogen or methyl, and

R<sup>1</sup> represents hydrogen or a moiety of Formula VI



VI,

wherein:

Ar<sup>1</sup> is selected from a 5- or 6-membered aromatic or heteroaromatic ring having 0, 1 or 2 nitrogen atoms, 0 or 1 oxygen atoms, and 0 or 1 sulfur atoms, or selected from an 8-, 9- or 10-membered fused aromatic or heteroaromatic ring system having 0, 1, 2 or 3 nitrogen atoms, 0 or 1 oxygen atoms, and 0 or 1 sulfur atoms;

D is selected from hydrogen, NR<sup>2</sup>R<sup>3</sup>, or E-Ar<sup>2</sup>;

wherein

E is a single bond, -O-, -S-, or -NR<sup>3</sup>;

Ar<sup>2</sup> is selected from a 5- or 6-membered aromatic or heteroaromatic ring having 0, 1 or 2 nitrogen atoms, 0 or 1 oxygen atoms, and 0 or 1 sulfur atoms;

where each Ar<sup>1</sup> or Ar<sup>2</sup> moiety may be unsubstituted or bear 1, 2 or 3 substituents selected from -R<sup>3</sup>, -C<sub>1</sub>-C<sub>6</sub>alkyl, -C<sub>2</sub>-C<sub>6</sub>alkenyl, -C<sub>2</sub>-C<sub>6</sub>alkynyl, halogen, -CN, -NO<sub>2</sub>, -CF<sub>3</sub>, -S(O)<sub>n</sub>R<sup>3</sup>, -NR<sup>2</sup>R<sup>3</sup>, -CH<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -OR<sup>3</sup>, -CH<sub>2</sub>OR<sup>3</sup> or -CO<sub>2</sub>R<sup>4</sup>;

R<sup>2</sup> and R<sup>3</sup> are independently selected at each occurrence from hydrogen, -C<sub>1</sub>-C<sub>4</sub>alkyl, aryl, heteroaryl, -C(O)R<sup>4</sup>, -C(O)NHR<sup>4</sup>, -CO<sub>2</sub>R<sup>4</sup> or -SO<sub>2</sub>R<sup>4</sup>, or

R<sup>2</sup> and R<sup>3</sup> in combination is -(CH<sub>2</sub>)<sub>j</sub>G(CH<sub>2</sub>)<sub>k-</sub> wherein G is oxygen, sulfur, NR<sup>4</sup>, or a bond;

j is 2, 3 or 4;

k is 0, 1 or 2;

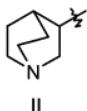
n is 0, 1 or 2, and

R<sup>4</sup> is independently selected at each occurrence from hydrogen, -C<sub>1-4</sub>alkyl, aryl, or heteroaryl;

and stereoisomers, enantiomers, *in vivo*-hydrolysable precursors and pharmaceutically-acceptable salts thereof.

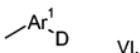
Claim 2 (original) A compound according to Claim 1 wherein:

A represents:



II

R<sup>1</sup> represents hydrogen or a moiety of Formula VI



wherein:

Ar<sup>1</sup> is selected from a 5- or 6-membered aromatic or heteroaromatic ring having 0 or 1 nitrogen atoms, 0 or 1 oxygen atoms, and 0 or 1 sulfur atoms;

D is selected from hydrogen, NR<sup>2</sup>R<sup>3</sup>, or E-Ar<sup>2</sup>;

wherein:

E is a single bond, -O-, -S-, or -NR<sup>3</sup>-;

Ar<sup>2</sup> is selected from a 5- or 6-membered aromatic or heteroaromatic ring having 0 or 1 nitrogen atoms, 0 or 1 oxygen atoms, and 0 or 1 sulfur atoms;

where each Ar<sup>1</sup> or Ar<sup>2</sup> moiety may be unsubstituted or bear 1, 2 or 3 substituents selected from halogen, -CN, -NO<sub>2</sub>, -CF<sub>3</sub>, -CH<sub>3</sub> or -C<sub>2</sub>H<sub>5</sub>;

R<sup>2</sup> and R<sup>3</sup> are independently selected at each occurrence from hydrogen, -C<sub>1</sub>-C<sub>4</sub>alkyl, aryl, heteroaryl, or

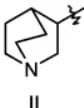
R<sup>2</sup> and R<sup>3</sup> in combination is -(CH<sub>2</sub>)<sub>j</sub>G(CH<sub>2</sub>)<sub>k-</sub> wherein G is oxygen;

j is 2, 3 or 4;

k is 0, 1 or 2;

and stereoisomers, enantiomers, *in vivo*-hydrolysable precursors and pharmaceutically-acceptable salts thereof.

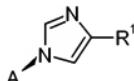
Claim 3 (original) A compound according to Claim 1, wherein A represents:



II

or an enantiomer thereof, and pharmaceutically-acceptable salts thereof.

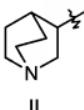
Claim 4 (original) A compound according to Claim 1, wherein said compound is an R-isomer in accord with formula VII,



VII

wherein A and R<sup>1</sup> are as defined for compounds of formula I.

Claim 5 (original) A compound according to Claim 4, wherein A is of formula II



II

and R<sup>1</sup> is as defined for compounds of formula I.

Claim 6 (original) A compound according to Claim 1, wherein E represents a single bond; or an enantiomer thereof, and pharmaceutically-acceptable salts thereof.

Claim 7 (original) A compound according to Claim 1, wherein Ar<sup>1</sup> is selected from phenyl or thiophenyl and D is morpholino.

Claim 8 (original) A compound according to Claim 1, wherein Ar<sup>1</sup> is selected from phenyl or thiophenyl and Ar<sup>2</sup> is selected from hydrogen, halogen, phenyl, furanyl or thiophenyl having optional substituents.

Claim 9 (original) A compound according to Claim 1, wherein one or more of the atoms is a radioisotope of the same element.

Claim 10 (Canceled)

Claim 11 (original) The method of Claim 10, A method of treatment of a disease or condition in which activation of the  $\alpha_7$  nicotinic receptor is beneficial which method comprises administering a therapeutically effective amount of a compound according to Claim 1 to a subject suffering from said disease or condition wherein said disease or condition is anxiety, schizophrenia, mania or manic depression.

Claim 12 (Currently amended.) A method of treatment ~~or prophylaxis of neurological disorders~~, psychotic disorders or intellectual impairment disorders, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

Claim 13 (Currently amended.) The method of Claim 12, wherein said disorder is Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is loss of cholinergic synapses, jetlag, nicotine addiction, craving, pain, and/or ulcerative colitis, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

Claim 14 (original) A method for inducing the cessation of smoking comprising administering an effective amount of a compound according to Claim 1.

Claim 15 (Currently amended.) A pharmaceutical composition comprising a therapeutically effective amount of a compound according to Claim 1 and a pharmaceutically-acceptable diluent, lubricant or carrier.

Claim 16 (Cancelled)

Claim 17 (original) The method of Claim 16, A method of treatment of a disease or condition in which activation of the  $\alpha_7$  nicotinic receptor is beneficial which method comprises administering a therapeutically effective amount of a pharmaceutical composition according to Claim 15 to a subject suffering from said disease or condition, wherein said disease or condition is anxiety, schizophrenia, mania or manic depression.

Claim 18 (Currently amended.) A method of treatment ~~or prophylaxis of neurological disorders, psychotic disorders or intellectual impairment disorders, which comprises administering a therapeutically effective amount of a pharmaceutical composition according to Claim 15.~~

Claim 19 (original) The method of Claim 12, wherein said disorder is Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, ~~Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is less of cholinergic synapses, jetlag, nicotine addiction, craving, pain, and for ulcerative colitis,~~ which comprises administering a therapeutically effective amount of a pharmaceutical composition according to Claim 15.

Claim 20 (original) A method for inducing the cessation of smoking comprising administering an effective amount of a pharmaceutical composition according to Claim 15.

Claims 21 and 22 (cancelled).

Claim 23. (New.) The method of claim 12, wherein said disorder is jetlag, nicotine addiction, craving, pain, or ulcerative colitis.

Claim 24. (New) The method of claim 18, wherein said disorder is jetlag, nicotine addiction, craving, pain, or ulcerative colitis.